

AMENDMENT  
U.S. Appln. No. 09/649,190

II. Claims 19-24 as being directed to an impeller; and

III. Claim 25 as being directed to a drive shaft.

**1. Election with Traverse.**

Applicant hereby elects the invention directed to Group I, pertaining to claims 1-18 and 26-30, with traverse.

**2. Argument in Support of Restriction Requirement Traversal.**

There are two criteria for a proper requirement for restriction between patentably distinct inventions:

- (a) the inventions must be independent or distinct as claimed; and
- (b) there must be a serious burden on the examiner if restriction is required. *Id.*

Applicant submits the Examiner has not established a proper basis for restriction in this case.

The Examiner alleges that the combination Group I does not require the specific structure of the impellers or drive shaft recited in Groups II and III. Moreover the Examiner alleges that the subcombinations (i.e., Group II and III) have separate utility such as use in other, prior art mixing and stirring applications. Applicant respectfully disagrees.

For example, claim 1 (Group I) recites: a device for generating a downward stream of molten metal including:

    a drive source

    a drive shaft having a first end and a second end, the first end connected to the drive source; and

*an impeller connected to the second end of the drive shaft, the impeller having two or more outwardly extending blades, at least one blade including a portion that directs molten metal at least partially downward.*

The structural novelty of the foregoing combination is present in the recited impeller.

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Claim 19 also recites a novel *impeller for use in a molten metal bath comprising:*

means for connecting the impeller to the shaft, and  
*means for generating a flow of metal.*

Applicant submits that the impeller structure recited claim 1 (Group 1) is including in the impeller recited in claim 19 (Group II), namely the means for generating a flow of metal.

The Examiner further alleges that the subcombinations have separate utility outside the claimed combination. Applicant respectfully disagrees. Under MPEP 806.05(d), it is not enough for the Examiner to merely state that the inventions claimed in groups II and III may be “used with other prior art” mixing and stirring applications. To combine the inventions of Group II and/or Group III with prior art molten metal mixing devices would yield the claimed combination of Group I. “[T]he burden is on the Examiner to provide an example” how one of the subcombinations has utility other than in a combination for a device for generating a downward stream of molten metal. It is respectfully submitted the Examiner has not met this burden of showing that the claimed impeller and drive shaft have utility outside molten metal mixing devices. Consequently, Applicant submits that a search of molten metal device art will yield all relevant analogous art related impellers and drive shafts for processing molten metal.

Lastly, the Examiner has not established that there is a “serious burden” of examining the alleged inventions of Groups II and III as required under MPEP 803. While it is true that a serious burden may be *prima facie* shown if the examiner shows by appropriate explanation either separate classification, separate status in the art, or a different field of search (MPEP 808.02), the Examiner has failed to properly establish this separate classification. The Examiner alleges that “stirring devices” are found in class 266, subclass 235; “impellers” in class 261, subclass 84; and “drive shafts” in class 464, subclass 179. However, it is noted that class 266, subclass 235 is specifically related to “impellers” for molten metal devices. Consequently there is no serious burden of examining together the claims of Group I and Group II.

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It is respectfully submitted that Applicant has identified and provided copies of the many known patents to the Examiner in the IDS submitted with the original application. Moreover, the Examiner is believed to be somewhat familiar with the prior art in this field, having examined several of Applicant's previous applications. Consequently, Applicant submits there is no serious burden for the Examiner to examine all the pending claims.

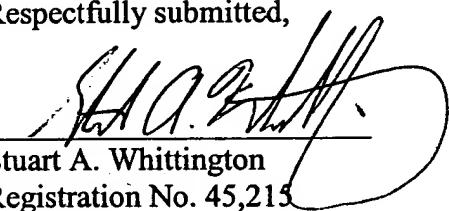
Furthermore, the dependent claims of Group I explicitly recite the limitations of the invention in Groups II and III that the Examiner desires to restrict to separate applications. For example, claim 3 depends from claim 1 (Group I), but explicitly recites the same general structural limitations of the shaft of independent claim 25 (Group III). Consequently, if the Examiner examines the limitations of elected claim 3, the Examiner will have necessarily have to search for pertinent shaft art of identified (Group III). Since there is no serious burden, Restriction is improper.

For all the foregoing reasons, Applicant respectfully requests the Examiner to reconsider and withdraw the Restriction Requirement. If there are any issues which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to **Deposit Account No. 19-3878**.

Respectfully submitted,

  
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Date: 10/24/01

Doc. # 170463v1